Homeland Security

Graduate Program Head
Alexander Siedschlag

Program Code
HLS

Campus(es)
World Campus (M.P.S.)

Degrees Conferred
Master of Professional Studies (M.P.S.)

The Graduate Faculty
View (https://secure.gradsch.psu.edu/gpms/index.cfm?searchType=fac&prog=HLS)

The intercollegiate Master of Professional Studies in Homeland Security (MPS-HLS) degree program is designed to prepare professionals and develop leaders for the field of homeland security by providing exceptional graduate education that includes an integrated curriculum, expert faculty, and student interaction. The program is comprised of courses from several Penn State colleges and delivered via distance education through the Penn State World Campus to accommodate the needs and careers of professionals who are already active in homeland security and related fields of civil security, or those interested in transitioning into the field. The program provides select graduate students with an integrated, cross-disciplinary curriculum that is focused on a set of unified educational goals to help them understand and manage the complexities of homeland security in a global environment. Within the degree program and in addition to its common core curriculum, students choose the base program (general homeland security and emergency management) or one of six options that represent main areas of concentration:

1. agricultural biosecurity and food defense;
2. counterterrorism;
3. cyber threat analytics and prevention;
4. geospatial intelligence;
5. public health preparedness; and
6. information security and forensics.

The participating academic units for this collaborative program are: Penn State Harrisburg, the College of Medicine (in collaboration with the Milton S. Hershey Medical Center), the College of the Liberal Arts, the College of Information Sciences and Technology, the College of Earth and Mineral Sciences, the College of Agricultural Sciences, and Penn State Great Valley.

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission (http://gradschool.psu.edu/prospective-students/how-to-apply). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions (http://gradschool.psu.edu/graduate-education-policies).

Core Application Packet

- Completed online Graduate School application (http://www.gradschool.psu.edu/prospective-students/how-to-apply) and payment of nonrefundable application fee
- Statement of purpose
- Vita or résumé
- Three letters of recommendation

- Official transcripts from all post-secondary institutions attended (http://www.gradschool.psu.edu/prospective-students/how-to-apply/new-applicants/requirements-for-graduate-admission)

Statement of Purpose and Curriculum Vitae

A statement of professional experience and goals (up to 500 words) and the applicant’s vita or résumé must accompany the application.

Letters of Recommendation

- The individuals writing letters should be familiar with you and comfortable discussing your professional and/or academic strengths and accomplishments.
- The Admissions Committee prefers that all letters be written within the last six months and reference the applicant’s current career goals and/or ability to perform graduate level study.
- A person choosing to submit a letter of reference will do this through the online application process and either select our pre-formatted template or upload his/her own letter.

GPA Requirements

The applicant’s grade-point average is interpreted by the Admissions Committee in the context of a completed application.

GRE Requirements

The Graduate Record Examination may be required by some options.

Other Considerations

Special backgrounds, abilities, and interests related to homeland security are desirable.

Degree Requirements

Master of Professional Studies (M.P.S)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Requirements (http://gradschool.psu.edu/graduate-education-policies).

The Master of Professional Studies in Homeland Security program requires a minimum of 33 credits, 24 of which must be earned at Penn State. Up to 10 graduate credits may be transferred in from a regionally accredited institution (subject to restrictions outlined in GCAC-309 Transfer Credit (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-309/transfer-credit)); if the full 10 credits are transferred, the minimum total number of credits in the degree program will be 34. At least 18 credits must be courses at the 500 or 800 level, of which 6 credits must be in 500-level courses.

Students are expected to maintain a B (3.0) or better average in academic courses to be retained in the program. Graduate Council policy requires that students must have a GPA of 3.0 or above in order to graduate from the program.

Each student will take a 9 credit core curriculum consisting of HLS 801/PADM 801, HLS 803/PHIL 803, and HLS 805/PLSC 805, as well as a non-credit Orientation Course. Students will also take 12 credits of prescribed courses for the specialized option. There are 9 elective credits that are chosen from an approved list in consultation with the student’s academic adviser. The list of electives is maintained by the Base Program and Option Directors and is provided to the students in the respective specialization area. Finally, each degree candidate must complete a capstone project on a topic related to homeland security and defense, in association with HLS 594/AGBIO 594/GEOG 594/INSC 594/IST 594/PHP 594/PLSC 594.
Time Limitation
All degree requirements for the Master of Professional Studies in Homeland Security must be met within five years of admission to degree status.

Prescribed Courses
Homeland security refers to the unifying core for the vast global network of organizations and institutions that are involved in the efforts to secure society. Regardless of field of specialization, or chosen discipline for graduate study, all professionals in the program will participate in a Unifying Core Curriculum with the following educational goals and objectives:

- Understand major policies and legislation that shapes homeland security in a globalized society.
- Become familiar with organizations that play a key role in the implementation of homeland security policies and administration, and recognize the interactions among them.
- Understand the way in which a person or group responds to a set of conditions so as to prevent and respond to incidents and catastrophic events when needed.
- Recognize the impact that catastrophic events, both natural and man-made, have on society and the domestic and global economy.
- Identify and assess potential threats, vulnerabilities, and consequences.
- Apply leadership skills and principles that are necessary for producing and acting on information of value within a collaborative setting.
- Communicate effectively in the context of particular institutional cultures.
- Use, conduct, and interpret research and data effectively in decision-making.
- Practice ethics and integrity as a foundation for analytical debate and conclusion.
- Develop an appreciation of the cultural, social, psychological, political, and legal aspects of terrorism and counterterrorism.

The Core Curriculum consists of the following four courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HLS/PLSC 805</td>
<td>Violence, Threats, Terror, and Insurgency</td>
<td>3</td>
</tr>
<tr>
<td>HLS/PHIL 803</td>
<td>Homeland Security: Social and Ethical Issues</td>
<td>3</td>
</tr>
<tr>
<td>HLS/PADM 801</td>
<td>Homeland Security Administration: Policies and Programs</td>
<td>3</td>
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<tr>
<td>HLS/PADM 404</td>
<td>Homeland Security and Defense in Practice</td>
<td>3</td>
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Electives
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Base Program Director and is provided to the students in the base program.

Capstone Experience
HLS 594 Research Topics 3
Total Credits 33

Agricultural Biosecurity and Food Defense Option

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HLS Orientation</td>
<td></td>
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<tr>
<td>HLS/PADM 801</td>
<td>Homeland Security Administration: Policies and Programs</td>
<td>3</td>
</tr>
<tr>
<td>HLS/PHIL 803</td>
<td>Homeland Security: Social and Ethical Issues</td>
<td>3</td>
</tr>
<tr>
<td>HLS/PLSC 805</td>
<td>Violence, Threats, Terror, and Insurgency</td>
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Electives
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option.

Capstone Experience
AGBIO 594 Agricultural Biosecurity and Food Defense Capstone Experience 3
Total Credits 33

Counterterrorism Option

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Electives
PLSC 836 Root Causes of Terrorism 3
PLSC 569 Counterterrorism 3
PLSC 838  Tools and Analysis of Counterterrorism  3
PLSC 837  Radicalization, Counter-Radicalization, and De-Radicalization  3

Electives
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option.

Capstone Experience
PLSC 594  Research in Political Science  3
Total Credits  33

Cyber Threat Analytics and Prevention Option

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<td>Homeland Security Administration: Policies and Programs</td>
<td>3</td>
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<tr>
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Cyber Threat Analytics and Prevention Option Prescribed Courses

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<tbody>
<tr>
<td>SWENG 545</td>
<td>Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>INSC 561</td>
<td>Web Security and Privacy</td>
<td>3</td>
</tr>
<tr>
<td>INSC 846</td>
<td>Network and Predictive Analytics for Socio-Technical Systems</td>
<td>3</td>
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IST 564  Crisis, Disaster and Risk Management  3

Electives
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option.

Capstone Experience

IST 594  Research Topics  3
Total Credits  33

Geospatial Intelligence Option

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<tbody>
<tr>
<td>GEOG 882</td>
<td>Geographic Foundations of Geospatial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 483</td>
<td>Problem-Solving with GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 880</td>
<td>Exploring Imagery and Elevation Data in GIS Applications</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 885</td>
<td>Advanced Analytic Methods in Geospatial Intelligence</td>
<td>3</td>
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Electives
Choose 9 credits from an approved elective list in consultation with adviser. The list of electives is maintained by the Option Director and is provided to the students in the option.

Capstone Experience

GEOG 594A  Culminating Experiences in Geospatial Intelligence  1

Geospatial Intelligence Capstone Experience  2

Student Aid

World Campus students in graduate degree programs may be eligible for financial aid. Refer to the Tuition and Financial Aid section (http://
www.worldcampus.psu.edu/tuition-and-financial-aid) of the World Campus website for more information.

**Courses**

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Agricultural Biosecurity (AGBIO) Course List (https://bulletins.psu.edu/university-course-descriptions/graduate/agbio)

Homeland Security (HLS) Course List (https://bulletins.psu.edu/university-course-descriptions/graduate/hls)

Public Health Preparedness (PHP) Course List (https://bulletins.psu.edu/university-course-descriptions/graduate/php)

**Learning Outcomes**

Graduates from the MPS-HLS program will be able to...

1. **SEARCH AND SYNTHESIZE** literature to integrate homeland security principles into disciplines and professional fields.

2. **INTEGRATE** the use of disciplinary methods, techniques, and knowledge to solve practical problems.

3. **IDENTIFY AND ASSESS** potential threats, vulnerabilities, and consequences in a context from local to global environments.

4. **EVALUATE** scientific evidence and best practice to inform and improve real-world decisions.

5. **PRACTICE** ethics and integrity as a foundation for analytical debate and conclusion.

6. **APPLY** leadership skills and principles to produce and act on information in a collaborative setting.

7. **COMMUNICATE** the major issues of their discipline effectively to a diverse community of the Homeland Security Enterprise.

**Contact**

**Campus**

World Campus

**Graduate Program Head**

Alexander Siedschlag

**Program Contact**

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(717) 948-6050

**Program Website**

View (https://www.worldcampus.psu.edu/penn-state-online-homeland-security-programs)

**Option Directors**

- **Base Program**: Alexander Siedschlag
- **Agricultural Biosecurity and Food Defense Option**: Gretchen Kuldau
- **Counterterrorism Option**: Andrew Vitek
- **Cyber Threat Analytics and Prevention Option**: Robin Qiu
- **Geospatial Intelligence Option**: Gregory Thomas
- **Information Security and Forensics Option**: David Fusco
- **Public Health Preparedness Option**: Eugene J. Lengerich